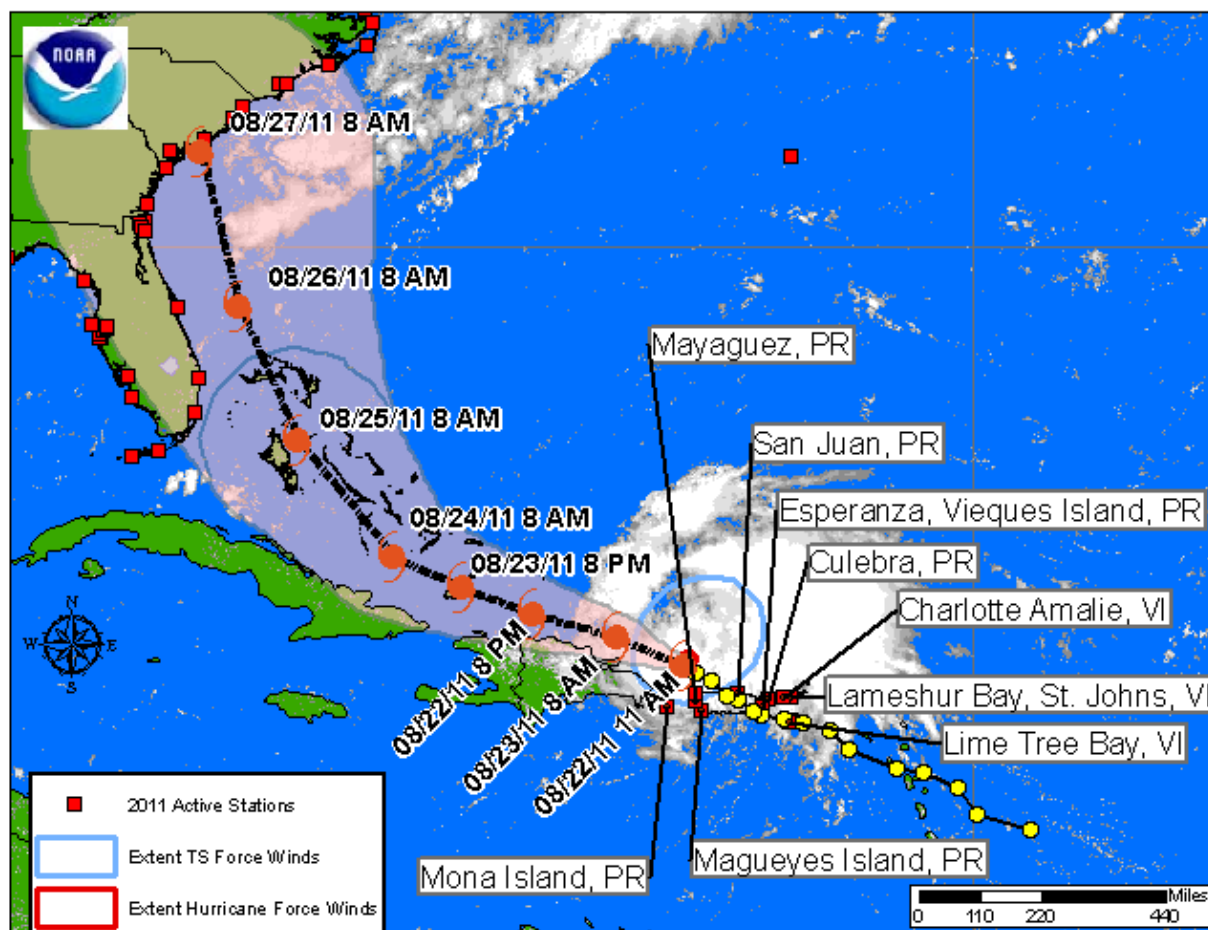




Hurricane IRENE QuickLook
Posted: 13:00 AST 08/22/2011

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 08/22/2011 13:00 AST, residual water levels in the U.S. Virgin Islands and Puerto Rico are generally falling but are still elevated between 0.17 and 0.75 feet above predicted values. Winds range between 5 and 25 kts with higher gusts in some locations. Barometric pressure is fluctuating across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

Culebra, PR Next predicted high tides are 1.02 ft (0.31 m) at 08/22/2011 17:03 AST and 0.65 ft (0.20 m) at 08/23/2011 03:04 AST.

Esperanza, PR Next predicted high tides are 0.70 ft (0.21 m) at 08/22/2011 19:12 AST and 0.75 ft (0.23 m) at 08/23/2011 19:53 AST.

Hurricane IRENE QuickLook, POSTED 13:00 AST 08/22/2011

San Juan, PR Next predicted high tides are 1.54 ft (0.47 m) at 08/22/2011 16:46 AST and 1.01 ft (0.31 m) at 08/23/2011 03:16 AST.

Magueyes Island, PR Next predicted high tides are 0.82 ft (0.25 m) at 08/22/2011 20:14 AST and 0.88 ft (0.27 m) at 08/23/2011 20:43 AST.

Mayaguez, PR Next predicted high tides are 0.81 ft (0.25 m) at 08/22/2011 16:31 AST and 0.52 ft (0.16 m) at 08/23/2011 03:54 AST.

Mona Island, PR Next predicted high tides are 0.85 ft (0.26 m) at 08/22/2011 21:23 AST and 0.89 ft (0.27 m) at 08/23/2011 22:04 AST.

Charlotte Amalie, VI Next predicted high tides are 0.87 ft (0.27 m) at 08/22/2011 18:18 AST and 0.94 ft (0.29 m) at 08/23/2011 19:02 AST.

Lameshur Bay, VI Next predicted high tides are 0.78 ft (0.24 m) at 08/22/2011 17:48 AST and 0.83 ft (0.25 m) at 08/23/2011 18:52 AST.

Lime Tree Bay, VI Next predicted high tides are 0.82 ft (0.25 m) at 08/22/2011 20:20 AST and 0.88 ft (0.27 m) at 08/23/2011 20:49 AST.

For additional data, please see the Center for Operational Oceanographic Products & Services website. For information on Highest Astronomical Tide (HAT), NAVD88 and other datums, please see Tidal Datums. For more information or archived products and reports, please see the Storm QuickLook Homepage.

Analyst:DW

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE IRENE ADVISORY NUMBER 8

1100 AM AST MON AUG 22 2011

...IRENE FORECAST TO PASS JUST TO THE NORTH OF HISPANIOLA...

SUMMARY OF 1100 AM AST...1500 UTC...INFORMATION

WATCHES AND WARNINGS

CHANGES IN WATCHES AND WARNINGS WITH THIS ADVISORY...

THE GOVERNMENT OF THE BAHAMAS HAS ISSUED A HURRICANE WARNING FOR THE TURKS AND CAICOS ISLANDS AND THE SOUTHEASTERN BAHAMAS.

THE TROPICAL STORM WARNING FOR THE BRITISH AND U.S VIRGIN ISLANDS HAS BEEN

DISCONTINUED.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A HURRICANE WARNING IS IN EFFECT FOR...

- * NORTH COAST OF THE DOMINICAN REPUBLIC FROM THE HAITI BORDER EASTWARD TO CABO ENGANO
- * SOUTHEASTERN BAHAMAS AND THE TURKS AND CAICOS ISLANDS

A HURRICANE WATCH IS IN EFFECT FOR...

- * NORTH COAST OF HAITI FROM LE MOLE ST. NICHOLAS EASTWARD TO THE DOMINICAN REPUBLIC BORDER
- * CENTRAL BAHAMAS

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- * PUERTO RICO...VIEQUES AND CULEBRA
- * SOUTH COAST OF THE DOMINICAN REPUBLIC FROM SOUTH OF CABO ENGANO WESTWARD TO THE HAITI BORDER
- * ALL OF HAITI

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS.. PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE. FOR STORM INFORMATION SPECIFIC TO YOUR AREA OUTSIDE THE UNITED STATES ...PLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.

DISCUSSION AND 48-HOUR OUTLOOK

AT 1100 AM AST...1500 UTC...THE CENTER OF HURRICANE IRENE WAS LOCATED NEAR LATITUDE 19.2 NORTH...LONGITUDE 67.5 WEST. IRENE IS MOVING TOWARD THE WEST-NORTHWEST NEAR 13 MPH AND THIS MOTION IS EXPECTED TO CONTINUE DURING THE NEXT 24 TO 48 HOURS. ON THIS TRACK THE CORE OF IRENE SHOULD BE PASSING JUST TO THE NORTH OF HISPANIOLA LATER TODAY AND EARLY TUESDAY AND REACH THE TURKS AND CAICOS ISLANDS AND THE SOUTHEASTERN BAHAMAS LATE TUESDAY.

MAXIMUM SUSTAINED WINDS HAVE INCREASED TO NEAR 80 MPH WITH HIGHER GUSTS. IRENE IS A CATEGORY ONE HURRICANE ON THE SAFFIR-SIMPSON HURRICANE SCALE. STRENGTHENING IS FORECAST DURING THE NEXT FEW DAYS.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 30 MILES FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 185 MILES TO THE NORTHEAST OF THE CENTER.

MINIMUM CENTRAL PRESSURE ESTIMATED FROM A RECONNAISSANCE PLANE WAS 988 MB...29.18 INCHES.

HAZARDS AFFECTING LAND

WIND...TROPICAL STORM CONDITIONS SHOULD GRADUALLY DECREASE IN PUERTO RICO

THIS MORNING. TROPICAL STORM CONDITIONS WILL REACH THE NORTHERN PORTION OF DOMINICAN REPUBLIC BY THIS AFTERNOON. HURRICANE CONDITIONS ARE POSSIBLE OVER THE NORTHERN PORTIONS OF THE DOMINICAN REPUBLIC LATER TODAY. THE HIGHEST WINDS ARE LIKELY TO OCCUR OVER AREAS OF ELEVATED TERRAIN. HURRICANE CONDITIONS ARE EXPECTED TO REACH THE SOUTHEASTERN BAHAMAS AND THE TURKS AND CAICOS ISLANDS TUESDAY...AND ARE POSSIBLE IN THE CENTRAL BAHAMAS BY LATE TUESDAY.

RAINFALL...IRENE IS EXPECTED TO PRODUCE ADDITIONAL RAINFALL ACCUMULATIONS OF 2 TO 4 INCHES ACROSS PUERTO RICO...THE VIRGIN ISLANDS. RAINFALL AMOUNTS OF 3 TO 6 INCHES ARE EXPECTED OVER NORTHERN HISPANIOLA...WITH ISOLATED AMOUNTS OF UP TO 10 INCHES POSSIBLE OVER HIGHER TERRAIN. THESE RAINS COULD CAUSE LIFE-THREATENING FLASH FLOODS AND MUD SLIDES IN AREAS OF STEEP TERRAIN. RAINFALL ACCUMULATIONS OF 5 TO 10 INCHES ARE POSSIBLE THE SOUTHEASTERN BAHAMAS AND THE TURKS AND CAICOS ISLANDS.

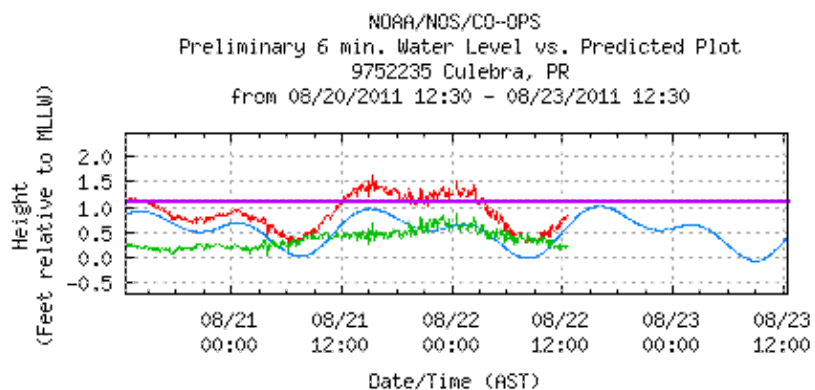
STORM SURGE...A STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 2 TO 4 FEET ABOVE NORMAL TIDE LEVELS ALONG THE ENTIRE COAST OF THE DOMINICAN REPUBLIC. STORM SURGE WILL ALSO RAISE WATER LEVELS BY AS MUCH AS 4 TO 6 FEET ABOVE NORMAL TIDE LEVELS OVER THE SOUTHEASTERN BAHAMAS AND TURKS AND CAICOS. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE AND DANGEROUS WAVES. ELEVATED WATERS LEVELS WILL GRADUALLY SUBSIDE TODAY IN PUERTO RICO AND THE VIRGIN ISLANDS.

FORECASTER AVILA

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Culebra - Water Level](#), [Culebra - Winds](#), [Culebra - Barometric](#), [Culebra - Air/Water Temp](#), [Esperanza, Vieques Island - Water Level](#), [Esperanza, Vieques Island - Winds](#), [Esperanza, Vieques Island - Barometric](#), [Esperanza, Vieques Island - Air/Water Temp](#), [San Juan - Water Level](#), [San Juan - Winds](#), [San Juan - Barometric](#), [Magueyes Island - Water Level](#), [Magueyes Island - Winds](#), [Mayaguez - Water Level](#), [Mayaguez - Winds](#), [Mona Island - Water Level](#), [Charlotte Amalie - Water Level](#), [Lameshur Bay, St. John - Water Level](#), [Lime Tree Bay - Water Level](#), [Lime Tree Bay - Winds](#),

[Culebra, PR - Return to List](#)



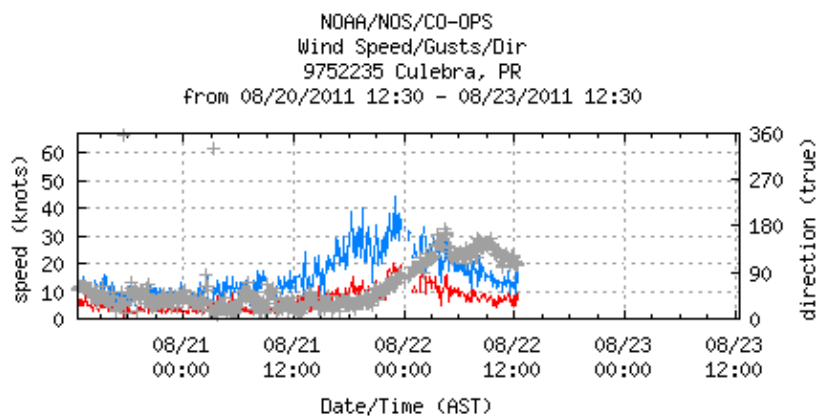
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/22/2011 12:30 (AST)

Relative to MLLW: **Observed: 0.85 ft.** **Predicted: 0.60 ft.** **Residual: 0.25 ft.**

Historical Maximum Water Level: Nov 6 2006, 0.85 ft. above MHHW

[Culebra, PR - Return to List](#)

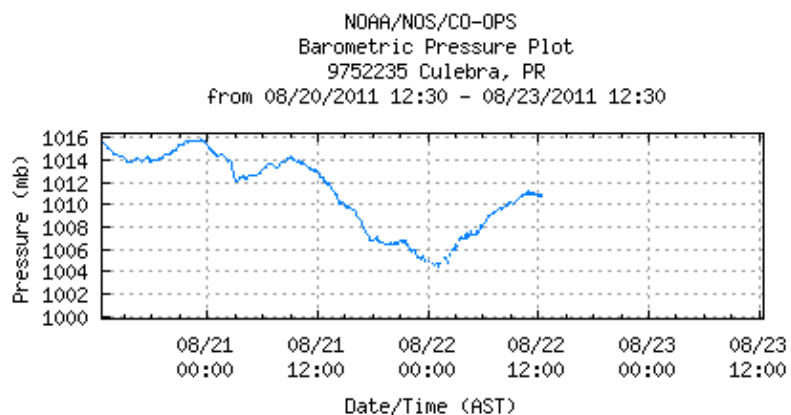


speed — gusts — direction +

Last Observed Sample: 08/22/2011 12:24 (AST)

Wind Speed: 8 knots **Gusts: 17 knots** **Direction: 107° T**

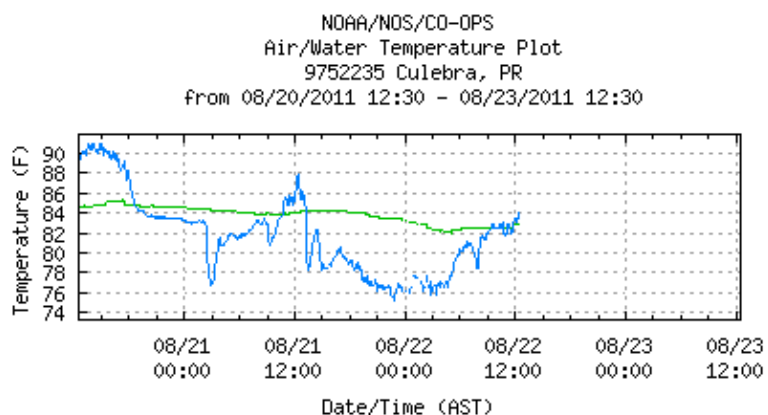
[Culebra, PR - Return to List](#)



Last Observed Sample: 08/22/2011 12:24 (AST)

Barometric Pressure: 1010.9 mb

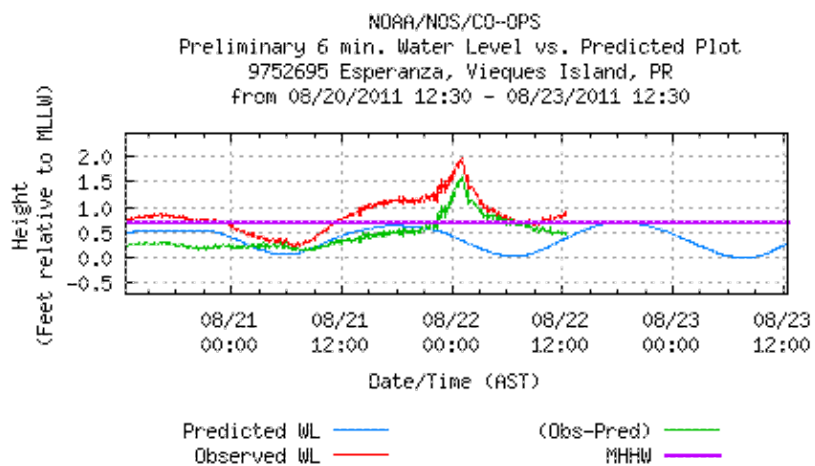
[Culebra, PR - Return to List](#)



Last Observed Sample: 08/22/2011 12:24 (AST)

Water Temperature: 82.8° F Air Temperature: 84.0° F

Esperanza, Vieques Island, PR - Return to List

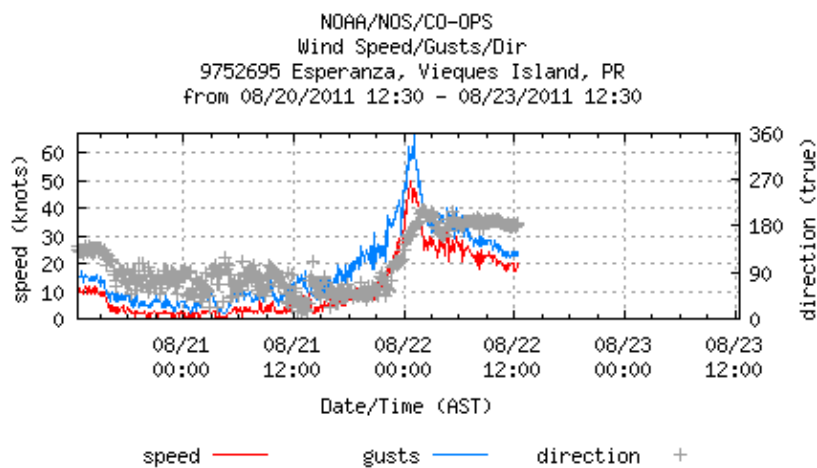


Last Observed Sample: 08/22/2011 12:24 (AST)

Relative to MLLW: **Observed: 0.90 ft.** **Predicted: 0.39 ft.** **Residual: 0.51 ft.**

Historical Maximum Water Level: Aug 30 2010, 0.84 ft. above MHHW

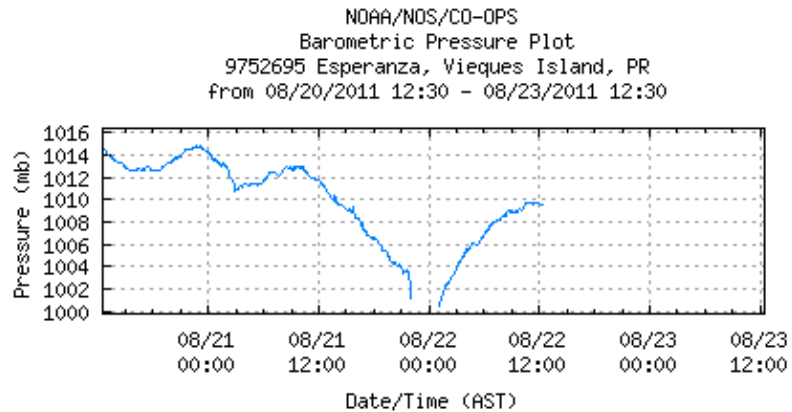
Esperanza, Vieques Island, PR - Return to List



Last Observed Sample: 08/22/2011 12:24 (AST)

Wind Speed: 20 knots **Gusts: 24 knots** **Direction: 181° T**

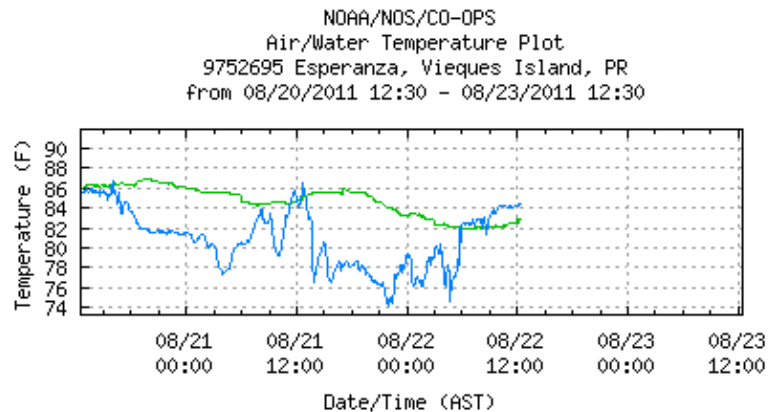
[Esperanza, Vieques Island, PR - Return to List](#)



Last Observed Sample: 08/22/2011 12:24 (AST)

Barometric Pressure: 1009.6 mb

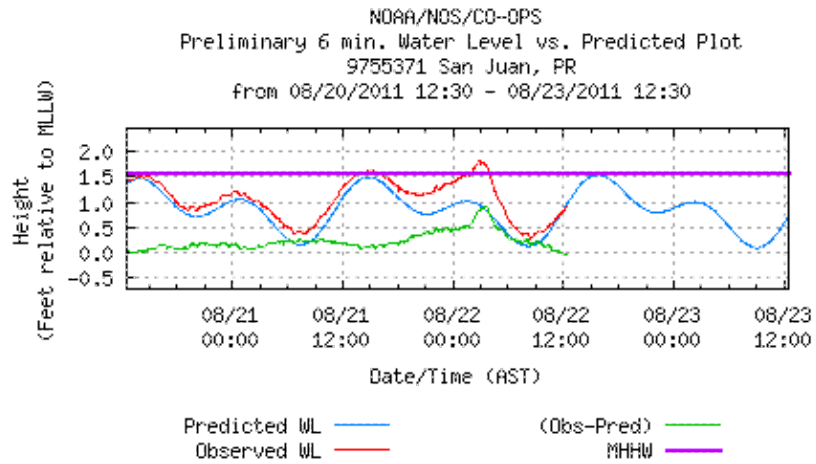
[Esperanza, Vieques Island, PR - Return to List](#)



Last Observed Sample: 08/22/2011 12:24 (AST)

Water Temperature: 82.9° F Air Temperature: 84.4° F

San Juan, PR - Return to List

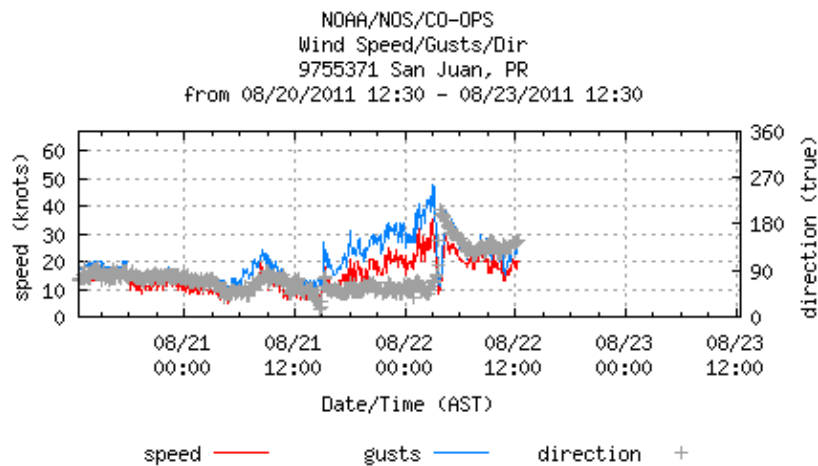


Last Observed Sample: 08/22/2011 12:24 (AST)

Relative to MLLW: **Observed: 0.93 ft.** **Predicted: 0.97 ft.** **Residual: -0.04 ft.**

Historical Maximum Water Level: Sep 21 1998, 1.21 ft. above MHHW

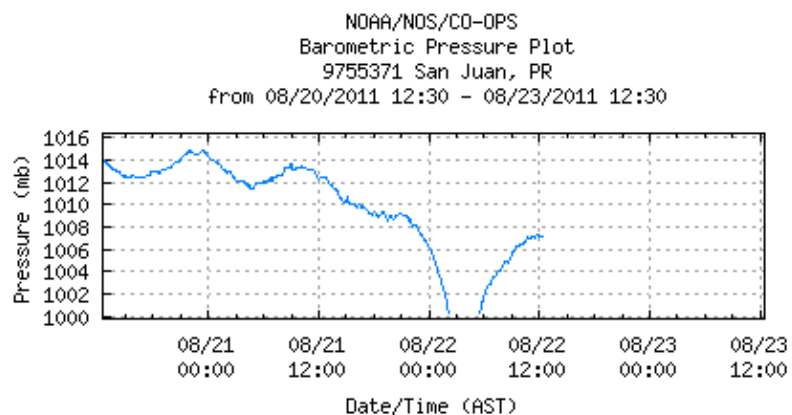
San Juan, PR - Return to List



Last Observed Sample: 08/22/2011 12:24 (AST)

Wind Speed: 20 knots **Gusts: 26 knots** **Direction: 148° T**

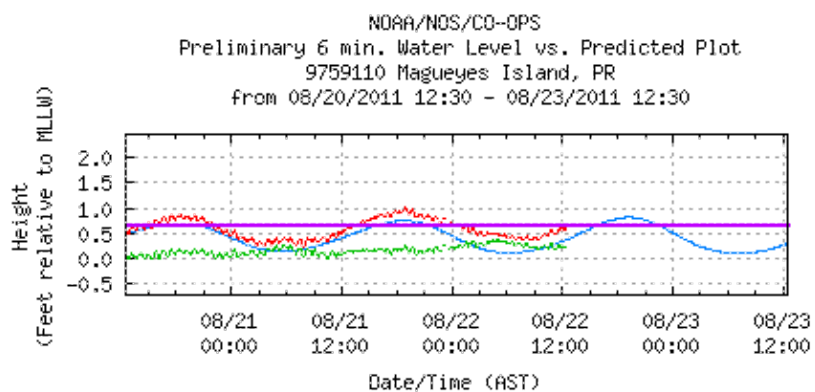
San Juan, PR - Return to List



Last Observed Sample: 08/22/2011 12:24 (AST)

Barometric Pressure: 1007.1 mb

Magueyes Island, PR - Return to List

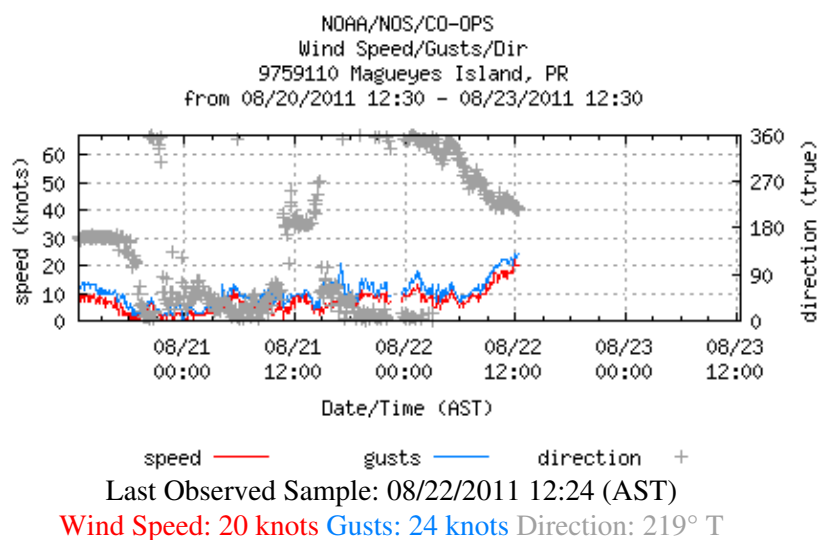


Last Observed Sample: 08/22/2011 12:24 (AST)

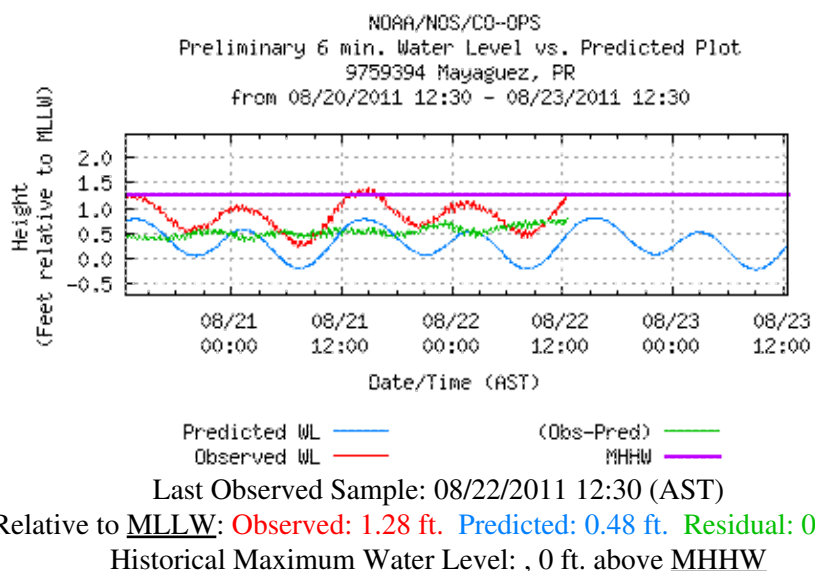
Relative to MLLW: **Observed: 0.61 ft.** **Predicted: 0.38 ft.** **Residual: 0.23 ft.**

Historical Maximum Water Level: Sep 22 1998, 1.6 ft. above MHHW

Magueyes Island, PR - Return to List

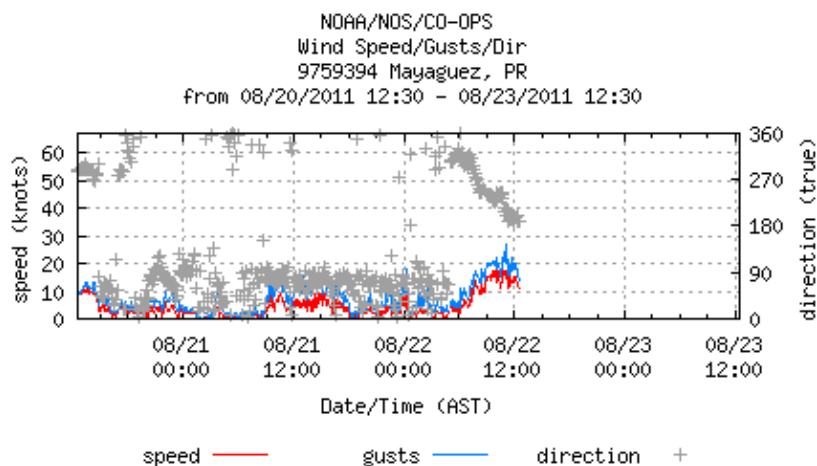


Mayaguez, PR - Return to List



Hurricane IRENE QuickLook, POSTED 13:00 AST 08/22/2011

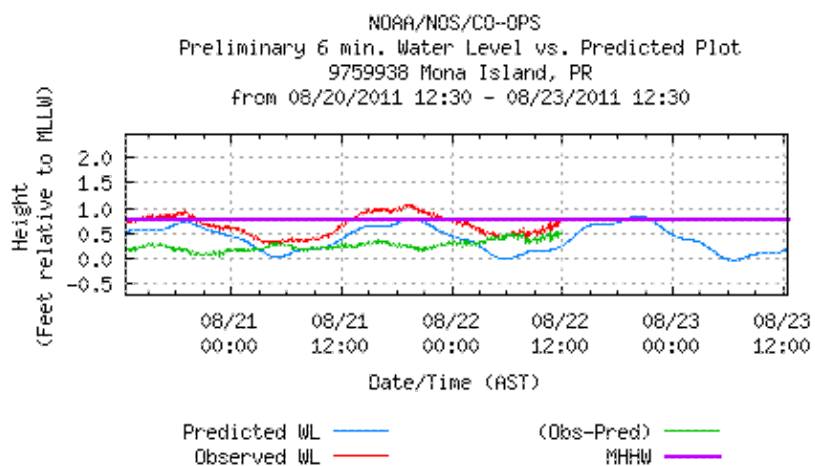
Mayaguez, PR - Return to List



Last Observed Sample: 08/22/2011 12:30 (AST)

Wind Speed: 11 knots Gusts: 14 knots Direction: 191° T

Mona Island, PR - Return to List

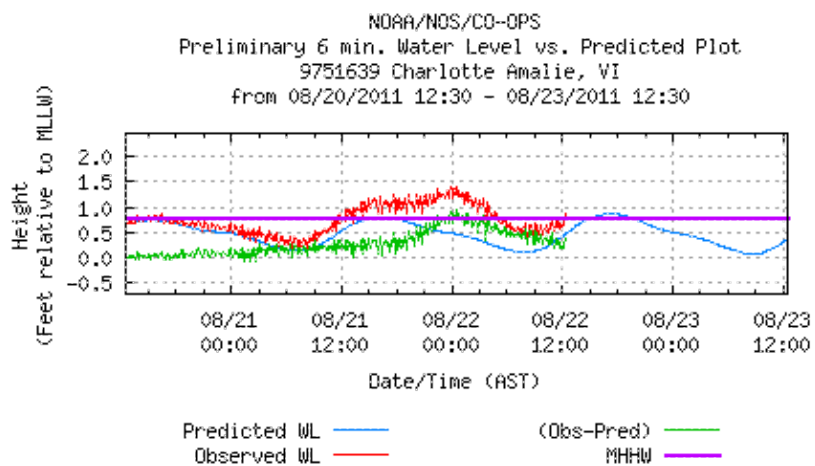


Last Observed Sample: 08/22/2011 11:54 (AST)

Relative to MLLW: Observed: 0.77 ft. Predicted: 0.26 ft. Residual: 0.51 ft.

Historical Maximum Water Level: Dec 23 2010, 1.26 ft. above MHHW

Charlotte Amalie, VI - Return to List

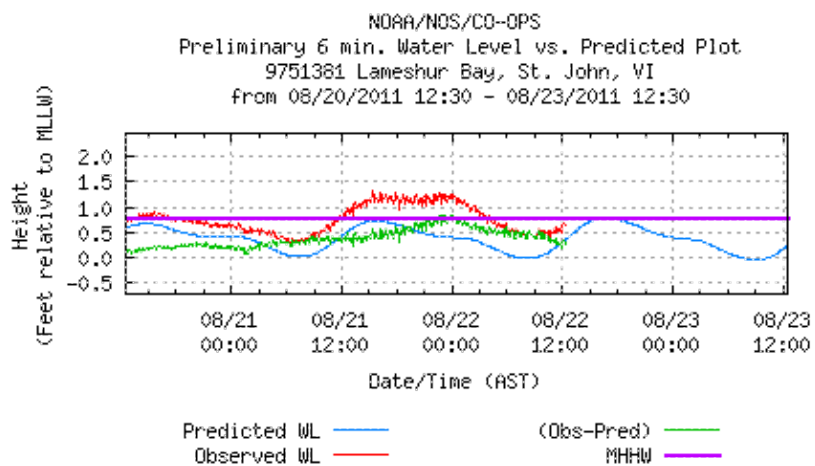


Last Observed Sample: 08/22/2011 12:24 (AST)

Relative to MLLW: **Observed: 0.82 ft.** **Predicted: 0.48 ft.** **Residual: 0.34 ft.**

Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above MHHW

Lameshur Bay, St. John, VI - Return to List

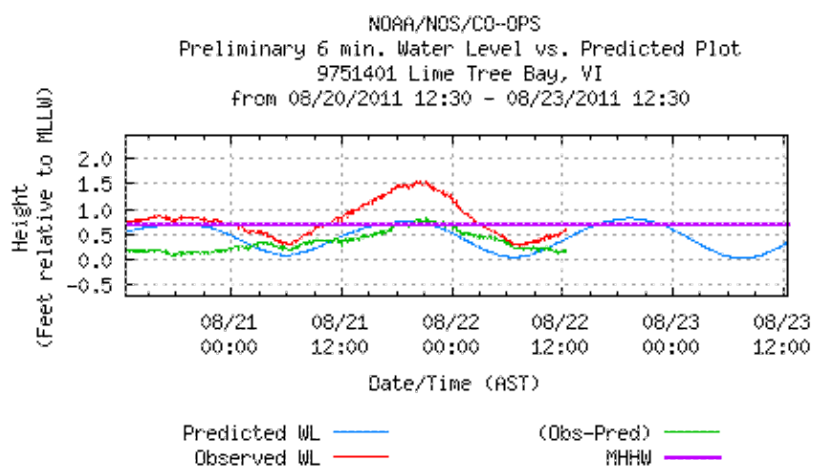


Last Observed Sample: 08/22/2011 12:24 (AST)

Relative to MLLW: **Observed: 0.64 ft.** **Predicted: 0.37 ft.** **Residual: 0.27 ft.**

Historical Maximum Water Level: Aug 30 2010, 0.9 ft. above MHHW

Lime Tree Bay, VI - Return to List

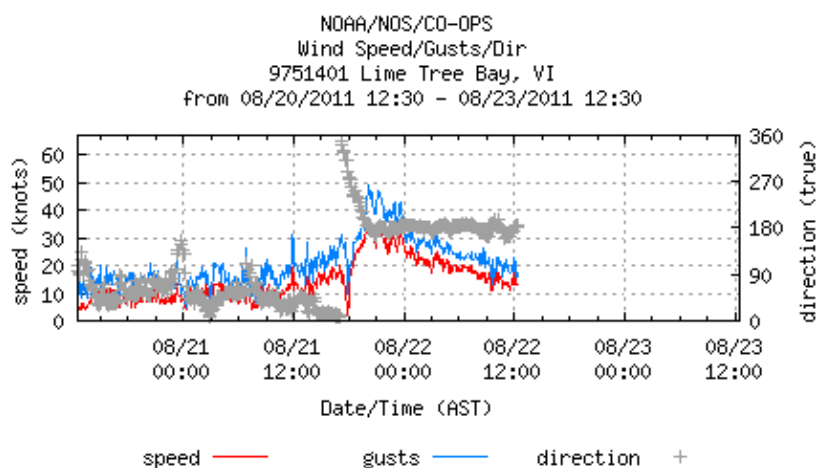


Last Observed Sample: 08/22/2011 12:24 (AST)

Relative to MLLW: **Observed: 0.62 ft.** **Predicted: 0.42 ft.** **Residual: 0.20 ft.**

Historical Maximum Water Level: Nov 17 1999, 1.88 ft. above MHHW

Lime Tree Bay, VI - Return to List



Last Observed Sample: 08/22/2011 12:24 (AST)

Wind Speed: 13 knots **Gusts: 17 knots** **Direction: 183° T**

Hurricane IRENE QuickLook, POSTED 13:00 AST 08/22/2011

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce